

A cyclical strategy to manage COVID-19, save lives and avoid economic ruin



On September 22, 2020, in a forum jointly hosted by the CBI and the LSE, my co-author Ron Milo, from Israel's Weizmann Institute of Science, and I presented a strategy to return to work in COVID-19 times in a way that will improve both health and economic outcomes. In this article I present the "big picture" and the possibility of implementing this at the firm or institution level.

This is particularly pertinent now, when a second COVID-19 wave is manifest in the UK and other countries, and when second lockdowns are being imposed.

The FT runs a highly informative website with a [chart](#) of new daily deaths per million people. The second wave in Europe is apparent while the U.S. has not really "flattened the curve" on its first wave. The appropriate policy response is now the topic of debate, dominating news everywhere. Before the second lockdown, countries have been taking stronger and stronger measures, but most of them did not seem to work. A major problem is that most countries have been unable to actually implement effective and refined measures and are now at loss as to what to do.

As a way out I propose that governments think in terms of **time** restrictions rather than **populations** or **sector** restrictions. I discuss an approach that keeps the epidemic under control, avoids economic ruin, and, in doing so, lessens some harsh tradeoffs. Importantly, the proposed strategy is fair, does not single out specific populations, and engenders predictability and stability. It also has the unique advantage of a record of successful implementation in recent months, at the company and institution level.

Let me first briefly reiterate four main lessons from this year's dismal experience. One is that the possible resolutions to this pandemic are either going for herd immunity, which implies a heavy death toll and may not last long, or waiting for a vaccine, whose arrival rate and efficacy are not yet clear. All countries have effectively opted for the latter route.

The second lesson is that there is a basic, harsh trade-off: do strict public health policy, such as lockdown, and you save lives and lighten the burden on the health system, but ruin the economy. Do not do any of that, and deaths will spiral and hospitals will crumble.

The third is that there is scope for refined or targeted measures, going beyond a coarse, “blanket” lockdown, to lessen the trade-off. Indeed, no European country has yet instituted a full, second lockdown. The policy game to be played is to do something effective while waiting for the arrival of a vaccine. The latter is likely to happen gradually, with fits and starts, in the course of 2021.

The fourth is that in practice there has been a large diversity of government reactions and choices regarding this trade-off across the world. Therefore, there have been very different outcomes across countries. Relatedly, in numerous places, politicians have proved inadequate in the face of a once-in-a-century pandemic.

The current problem is that measures undertaken thus far have often had limited success. In particular, a major form of targeted policy – an efficient trace and track system – has often failed. Few countries have managed it practically, Germany being a notable exception, and most are struggling to establish a workable system. These systems have had only marginal impacts on reducing the spread of coronavirus.

Another important policy, targeting particular towns or regions, has proved to be difficult too. Restrictive measures in different regions, such as the Northern parts of England, have failed to stem the rise of the epidemic. Social and political forces offer resistance to any measures differentially targeting populations or sectors.

I suggest that a viable alternative exists in the form of time restrictions rather than population or sector restrictions. One such scheme, was proposed by Uri Alon and Ron Milo, from Israel’s Weizmann Institute of Science, and me back in April-May; see FT Op Ed on 21 April “[How to Reopen Society More Quickly](#),” and NYT Op Ed on 11 May “[10-4: How to Reopen the Economy by Exploiting the Coronavirus’s Weak Spot](#).”

The idea is to exploit the way coronavirus develops in human beings to open our societies for four days out of every 14. Most infected people are non-infectious for the first three days after infection and are at peak infectiousness at days 4-7. So a 14-day cycle, that sees people go to work for four days and then be locked down for ten, would minimise the spread of the disease. Most of those infected during workdays would reach maximum infectiousness during lockdown, reducing the spread. The plan has the added advantage that it can be implemented at the national, regional, city, company, or institutional levels. This idea builds on epidemiological features and can also be implemented by dividing the relevant population into two halves, each working 4 days on alternate weeks.

This plan has some very attractive features.

It is fair. All populations are included and no age group, sector, region, or ethnic group is singled-out. It is multi-levelled.

It can be implemented at the national, regional, city, company, or institutional levels.

It engenders predictability and confidence. In places where variants of it have been implemented, infection rates were low and confidence was re-instated. For example, the ophthalmology section of a hospital system in Los Angeles implemented a similar plan and achieved exactly that.

It is flexible. One can allow for various configurations, such as 5 days of work and 9 days of lockdown, then 6 days of work and 8 days of lockdown etc., adjusting the plan following actual experience.

It actually works. Ever since the FT and NYT publications we have seen widespread interest in this plan, from schools, universities, companies, and various towns, globally. Notably, the Austrian school system did a version of the plan starting mid-May and the global company Mastercard has been successfully implementing it since June, in dozens of offices around the world with thousands of employees. The plan has proved to be very workable, infection rates are low, and its implementation is relatively straightforward.

It has very good economic AND health implications. Examination of this plan in a series of academic papers found substantial benefits, both in terms of health outcomes (reduced infections and deaths, and a lighter burden on the health system), and in terms of significantly reducing economic loss.

This is not some kind of miracle solution. The underlying rationale is partial opening and partial lockdown to bring down average R, the reproduction parameter. While not guaranteed, R may even decline to below 1. Hence it offers some control of the epidemic while allowing for economic activity, albeit at reduced levels.

This is a call for realistic and constructive action – to save lives and avoid economic ruin. In face of a second wave, the time is now.



Notes:

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